# A Bibliography of Material Relative to Massachusetts Wetlands Regulation and Topsfield's General Wetland Bylaw Ch. 62.

#### Complied by:

# ~ Holger Luther-Conservation Commissioner ~

#### **Introduction:**

This compendium has been collected to provide Topsfield residents and others with a deeper understanding of the purpose and intent of state and local wetlands protection regulations.

In the following pages topics of the wetlands protection regulations are described and hypertext links are provided that direct the reader to the specific often non-legal sources prepared by state agencies, local administrations, and conservation and recreation organizations in the Commonwealth. This compendium will be updated from time to time to track related information as it is made available on the internet.

- General information concerning wetlands protection: This link will give you information
  on the intent and scope of wetland protection in Massachusetts:
  <a href="http://www.mass.gov/eea//agencies/massdep/water/watersheds/protecting-wetlands-in-massachusetts.html">http://www.mass.gov/eea//agencies/massdep/water/watersheds/protecting-wetlands-in-massachusetts.html</a>
- 2. **Buffer zone uses** The 100-ft buffer zone between a developed site and wetlands is often a "gray" area. This link from Tewksbury answers a number of plain questions. Topsfield has somewhat different regulations, so it's best to contact the TCC. The link is: <a href="http://tewksbury.info/Pages/TewksburyMA\_BComm/Conservation/ConComSubReport-021613.pdf">http://tewksbury.info/Pages/TewksburyMA\_BComm/Conservation/ConComSubReport-021613.pdf</a> Also the science of buffer zones is addressed in: <a href="http://ag.umass.edu/sites/ag.umass.edu/files/interest-topic-pdfs/final\_project.pdf">http://ag.umass.edu/sites/ag.umass.edu/files/interest-topic-pdfs/final\_project.pdf</a>
- 3. *Riverfront protection* regulations are discussed in depth in the following link: <a href="http://www.mass.gov/eea/agencies/massdep/water/watersheds/rivers-protection-act-q-and-a.html#WhatisthepurposeoftheRiversProtectionAct">http://www.mass.gov/eea/agencies/massdep/water/watersheds/rivers-protection-act-q-and-a.html#WhatisthepurposeoftheRiversProtectionAct</a>
- 4. *Rare species of insects, plant, and animals* are also covered in the protection act. The regulations concerning these are described in the link: <a href="http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/">http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/</a>
- 5. *Horse owners* living near wetlands, streams, or watershed areas may want to consult the following link: <a href="http://www.mass.gov/eea/agencies/massdep/water/watersheds/a-horse-owner-guide-to-protecting-ma-natural-resources.html">http://www.mass.gov/eea/agencies/massdep/water/watersheds/a-horse-owner-guide-to-protecting-ma-natural-resources.html</a>
- 6. *Storm-water and run-off management* (best management policies BMP's) are described in the link: <a href="http://www.mass.gov/eea/agencies/massdep/water/regulations/massachusetts-stormwater-handbook.html">http://www.mass.gov/eea/agencies/massdep/water/regulations/massachusetts-stormwater-handbook.html</a>
- 7. *Culverts, bridges, and stream crossings* standards and requirements are discussed in the Mass River and Stream Crossing Standards available at the two links:

- http://www.mass.gov/eea/docs/dfg/der/pdf/stream-crossings-handbook.pdf http://www.maccweb.org/documents/stream\_crossings\_05/acoe\_stream\_crossing.pdf
- 8. *Pond or lake residents* who are concerned with water quality will find information on how best to protect the water's edge in the link: http://mass.gov/eea/docs/dep/water/bufin2.pdf
- 9. *Aquatic plant growth* management in ponds and lakes is described in the link: <a href="http://mass.gov/eea/docs/dep/water/laws/a-thru-h/alkguide.pdf">http://mass.gov/eea/docs/dep/water/laws/a-thru-h/alkguide.pdf</a>
- 10. *Trails and trail boardwalk designs* are found in a brochure by the Acton Land Stewardship Committee at the link: <a href="http://www.actontrails.org/BoardwalkDesign.pdf">http://www.actontrails.org/BoardwalkDesign.pdf</a>
- 11. *Pervious pavement* for sensitive areas and no freeze-ups in the winter can be found at: <a href="http://www.perviouspavement.org/">http://www.perviouspavement.org/</a> and <a href="http://www.hotmix.org/index.php">http://www.hotmix.org/index.php</a> and then typing the keyword "pervious" into the search box.
- 12. *Low Impact Development (LID)* is a new approach to developing marginal tracts of land. A basic LID primer is found at the link: <a href="http://www.toolbase.org/PDF/DesignGuides/Builder\_LID.pdf">http://www.toolbase.org/PDF/DesignGuides/Builder\_LID.pdf</a>
- 13. *Invasive plants* may be identified and their distribution noted at the link: <a href="http://eddmaps.org/ipane/earlydetection/early.htm">http://eddmaps.org/ipane/earlydetection/early.htm</a> and <a href="http://www.massnature.com/Plants/Invasives/invasiveplants.htm">http://www.massnature.com/Plants/Invasives/invasiveplants.htm</a>
- 14. *Beavers in your backyard?* A link to "living with beavers" <a href="http://mass.gov/eea/docs/dfg/dfw/wildlife/wildlife-living/living-with-beavers.pdf">http://mass.gov/eea/docs/dfg/dfw/wildlife/wildlife-living/living-with-beavers.pdf</a> and another link to obtain practical solutions that both you and beavers can live with: <a href="http://www.beaversolutions.com">http://www.beaversolutions.com</a>
- 15. *EPA MS4 storm-water regulations for municipalities* These regulations under the Federal Clean Water Act affect all Mass. municipalities. Requirements and standards are found at: <a href="http://cfpub.epa.gov/npdes/stormwater/munic.cfm">http://cfpub.epa.gov/npdes/stormwater/munic.cfm</a>
- 16. *Dumping hazardous materials down stormdrains* Illicit discharge prohibitions are discussed in the link:

  <a href="http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=min\_measure&min\_measure\_id=3">http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=min\_measure&min\_measure\_id=3</a>
- 17. Rainfall intensity, duration, and frequency (IDF) Wetlands and rainfall are closely linked. A rainfall IDF database managed by the North-East Region Climate Center resident at Cornell Univ. can be accessed at: <a href="http://precip.net/">http://precip.net/</a> and the actual IDF data for Essex County is found by selecting Massachusetts and Essex Co. from the dialog box
- 18. *Hydro-Cad users modeling stormater run-off* Hydro-Cad uses IDF data from the Nat'l Weather Bureau that was developed in the 1940's. Tosfield now requires the use of the NRCC data for design storm calculations. The NRCC data for Essex Counta can be downloaded into Hydro-Cad by accessing <a href="http://hydrocad.net/rainfall/pfd.htm">http://hydrocad.net/rainfall/pfd.htm</a> and following the prompts.

### II Laws and Regulations pertaining to Wetlands protection.

Below are links to the basic laws pertaining to the protection of wetlands and endangered species as well as links to regulation adopted relative to the administration of these laws – state and local.

- 1. *The Wetlands Protection Act GLC 131*, *S40*: https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIX/Chapter131/Section40
- 2. The Endangered Species Act GLC131,S40A: https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIX/Chapter131A
- 3. Regulations under GLC131,S40 310CMR10: http://www.lawlib.state.ma.us/source/mass/cmr/cmrtext/310CMR10.pdf
- 4. Regulations under GLC131, S40A: <a href="http://www.lawlib.state.ma.us/source/mass/cmr/cmrtext/321CMR10.pdf">http://www.lawlib.state.ma.us/source/mass/cmr/cmrtext/321CMR10.pdf</a>
- 5. Rivers Protection Act Ch. 258 of the Acts of 1996: The actual text is hard to access, but the DEP has a good exegesis of the act.

  <a href="http://mass.gov/eea/agencies/massdep/water/regulations/massachusetts-rivers-protection-act-about.html">http://mass.gov/eea/agencies/massdep/water/regulations/massachusetts-rivers-protection-act-about.html</a>
- 6. Regulations pertaining to a Riverfront Area: Access (3) above and scroll to 10.58 "Riverfront Area".
- 7. *Topsfield General Wetlands Bylaw Ch. LXII*: <a href="http://topsfield-ma.gov/documents/bylaws/general/documents/ChapterLXIIWetlands.pdf">http://topsfield-ma.gov/documents/bylaws/general/documents/ChapterLXIIWetlands.pdf</a>
- 8. Regulations under Ch. LXII Bylaw: <a href="http://topsfield-ma.gov/documents/conservation/documents/Regs1854-R10Revision06-13-12CURRENT\_000.pdf">http://topsfield-ma.gov/documents/conservation/documents/Regs1854-R10Revision06-13-12CURRENT\_000.pdf</a>